In the claims:

Claims 1-17 canceled.

18. (previously presented) A filter for water, comprising a housing provided with an inlet branch pipe, an outlet branch pipe and a drain branch pipe with shutoff valves; a main filtration element composed of an ion-exchange material and having inlet and outlet surfaces for a liquid being filtered, said ion-exchange material of said main filtration element being volumetric with a predetermined geometric shape, is armored by a load-bearing reinforcement attached to a perforated support and forming a continuous porous framework of microglobules with pores of predetermined size in correspondence with parameters of cleaning, wherein the filtration mass volume of the material of said main filtration element is determined according to the follows expression:

$\nu_{\lambda} \frac{Q.L^2}{k.h_{\nu}}$ for a flat

filter $\nu_{cyl} = \frac{Q.L^2(L+d)}{k \cdot h_{\nu} \cdot d}$ for a hollow cylindrical filter;

$$\nu_{con} = \frac{Q.L^2(2L + d_k + D_K)}{k.h._{\nu}(d_k + D_k)}$$

where Q is a required flow rate of the liquid being purified kg/s;

L is a filtering layer thickness, mm;

d is an internal diameter of the cylinder filter, mm;

d_k and D_k are internal diameters of an upper and a lower cross-section of the conical filter, mm;

k=0.12-0.14 mm/s, is an experimental coefficient for the material with a spatial globular structure maker;

an additional filtration correction protection layer covering an inlet surface of said main filtration element and composed of a finely grained substance introduced in form of powder via a loading valve in a housing cavity into a flow of filtration liquid deposited on said inlet surface of said main filtration element and dynamically retained on it by a liquid velocity head, so that a powder granule size is greater than a size of ion-exchange material pores, wherein an additional volume introduced depending upon a shape of the main filtration elements is determined according to a following expression

V_{add} - $HB\Delta$, mm^2 for a flat filter;

$V_{add}=\pi H\Delta(D+\Delta)$, mm^3, for a cylindrical filter;

$V_{add=H(R\Delta+r\Delta+\Delta^2)}$, mm^3, for a conical filter

where H is a filtration element height, mm

B is a filtration element width; mm

D is a filtration element diameter, mm;

R is a radius of a lower conical base, mm;

r is a radius of an upper conical base, mm;

Δ is a required thickness of the protective layer mm.

19. (previously presented) A filter for water as defined in claim 18, wherein the filter is formed as a hollow cylinder.

20. (currently amended) A filter for water as defined in claim 18, wherein the filter has an inlet area area and an outer surface area with a ratio of said inlet surface to said outlet surface equal to 1.6-2.6.

21. (previously presented) A filter for water as defined in claim 18, wherein the filter is formed as a cone.

22. (previously presented) A filter for water as defined in claim 18, wherein said filter is formed flat.

23. (currently amended) A filter for water as defined in claim ~~1~~18, wherein said ~~volumetric~~ reinforcement is composed of fibrous non-woven sheet material.

24. (currently amended) A filter for water as defined in claim 23, wherein said fibrous non-woven sheet material is a synthetic ~~winterizer~~ polymeric material.

25. (currently amended) ~~A filter for water as defined in claim 18~~A filter for water, comprising a housing provided with an inlet branch pipe, an outlet branch pipe and a drain branch pipe with shutoff valves; a main filtration element composed of an ion-exchange material and having inlet and outlet surfaces for a liquid being filtered, said ion-exchange material of said main filtration element being volumetric with a predetermined geometric shape, is armored by a load-bearing reinforcement attached to a perforated support and forming a continuous porous framework of microglobules with pores of predetermined size in correspondence with parameters of cleaning, wherein the filtration mass volume of the material of said main filtration element is determined according to the follows expression:

$\nu_\lambda \frac{Q.L^2}{k.h_\nu}$ for a flat

filter $\nu_{cyl} = \frac{Q.L^2(L+d)}{k \cdot h_\nu \cdot d}$ for a hollow cylindrical filter;

$$\nu_{con} = \frac{Q.L^2(2L + d_k + D_K)}{k.h_\nu(d_k + D_k)}$$

where Q is a required flow rate of the liquid being purified kg/s;

L is a filtering layer thickness, mm;

d is an internal diameter of the cylinder filter, mm;

d_k and D_k are internal diameters of an upper and a lower cross-section of the conical filter, mm;

k=0.12-0.14 mm/s, is an experimental coefficient for the material with a spatial globular structure maker;

an additional filtration correction protection layer covering an inlet surface of said main filtration element and composed of a finely grained substance introduced in form of powder via a loading valve in a housing cavity into a flow of filtration liquid deposited on said inlet surface of said main filtration element and dynamically retained on it by a liquid velocity head, so that a powder granule size is greater than a size of ion-exchange material pores, wherein an additional volume introduced depending upon a shape of the main filtration elements is determined according to a following expression

V_{add} - $HB\Delta$, mm^2 for a flat filter;

$V_{add}=\pi H\Delta(D+\Delta)$, mm^3, for a cylindrical filter;

$V_{add=H(R\Delta+r\Delta+\Delta^2)}$, mm^3, for a conical filter

where H is a filtration element height, mm

B is a filtration element width; mm

D is a filtration element diameter, mm;

R is a radius of a lower conical base, mm;

r is a radius of an upper conical base, mm;

Δ is a required thickness of the protective layer mm, wherein said protection additional layer is composed of a filtration material which is chemically ~~active~~inert substance.

26. (previously presented) A filter for water as defined in claim 25, wherein said chemically inert substance is perlite.

Claim 27 cancelled.

28. (currently amended) A filter of water as defined in claim ~~27~~25, wherein said chemically active substance is resorein-formaldehyde resin.

29. (previously presented) A filter of water as defined in claim 18, wherein said additional protective layer has a material which corrects pH value of water being filtered and is composed of dolomite.

30. (previously presented) A filter of water as defined in claim 18, wherein said additional protection layer is composed of a material with inclusion of a bacteriostatic substance.

31. (previously presented) A filter of water as defined in claim 30, wherein said bacteriostatic substance is active silver.

Claims 32-38 cancelled.